

FIG.1

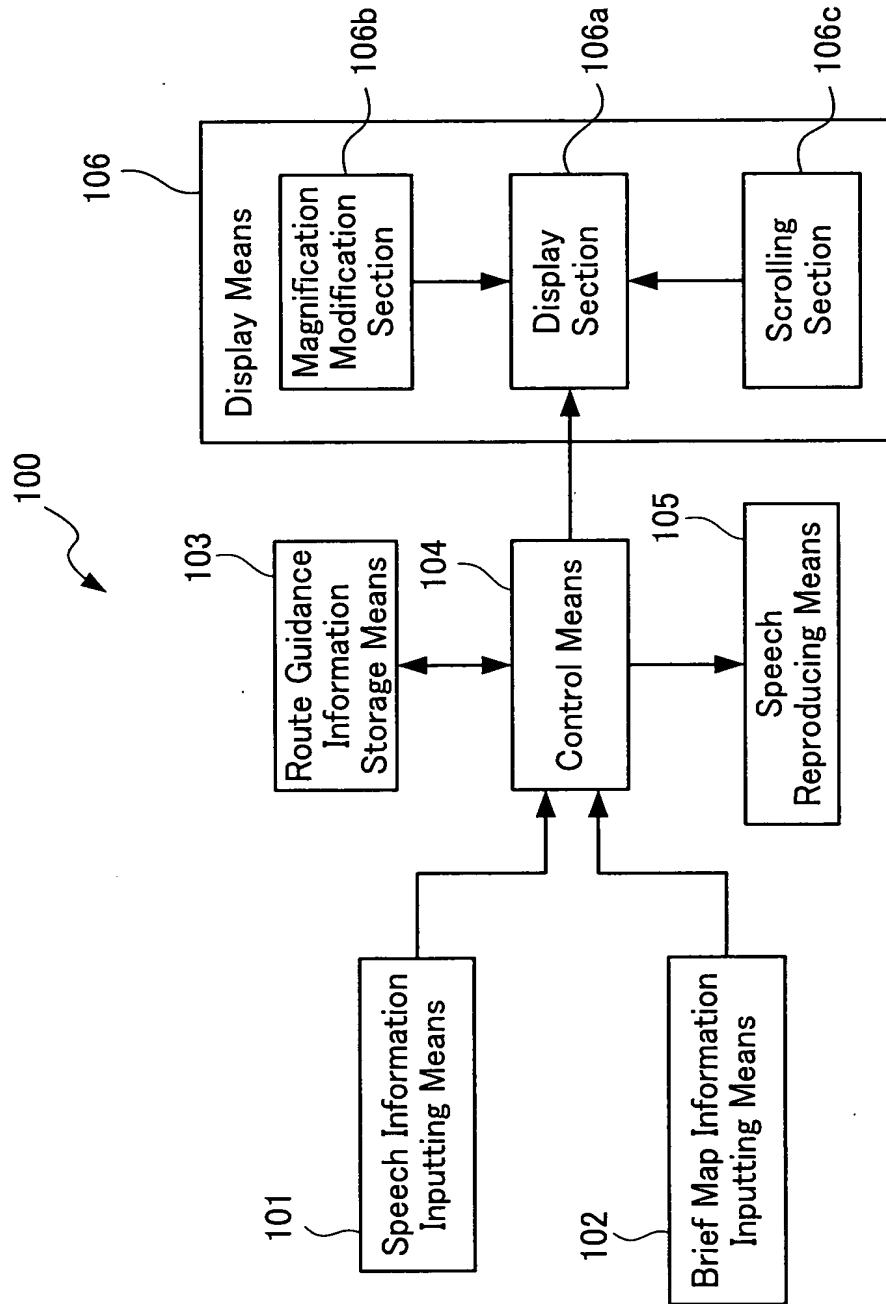


FIG.2

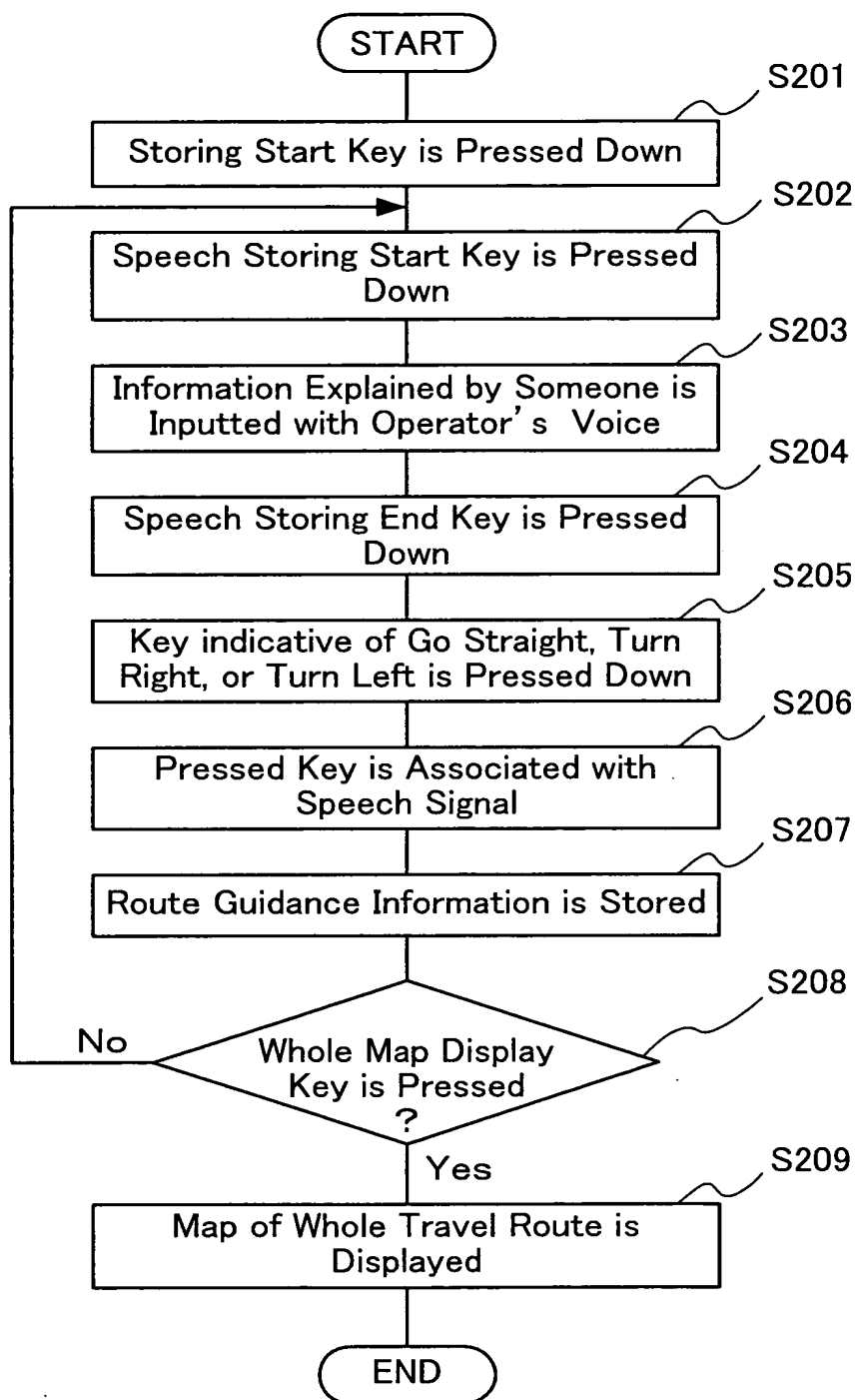


FIG.3

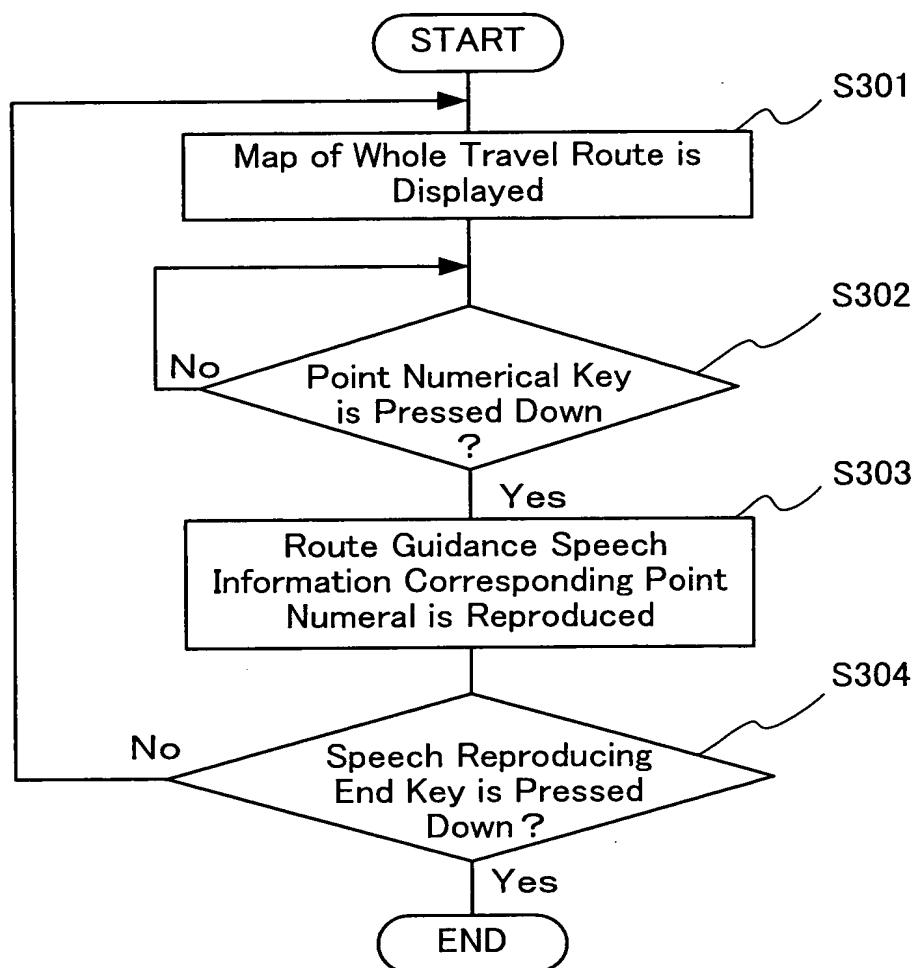


FIG.4

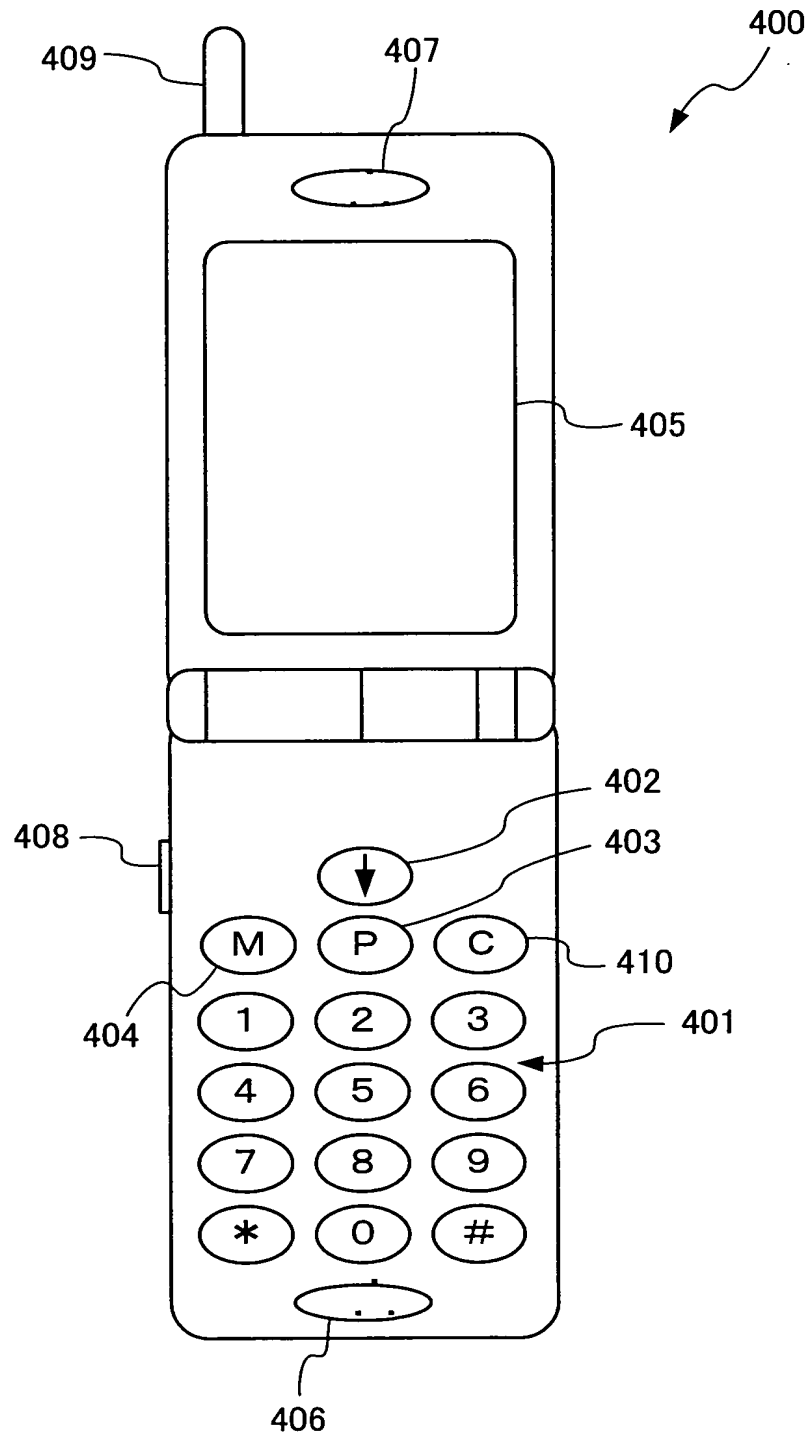


FIG.5

Numeral Key	Function
[1]	Speech Storing Operation is Started
[2]	Speech Storing Operation is Ended
[3]	—
[4]	Turn Left
[5]	Go Straight
[6]	Turn Right
[7]	Facility is Located in Left Direction
[8]	—
[9]	Facility is Located in Right Direction
[0]	Storing Operation is Started/Ended

FIG.6

Key Operation	Speech Numeral	Speech Storing Operation	Point Numeral	Symbol Type
[1] is Pressed Down	Increment	Speech Storing Operation is Started	Increment	
[2] is Pressed Down		Speech Storing Operation is Ended		"Go Straight" is Temporally Stored
Following[2],[4](Turn Left) is Pressed Down				Overwritten with "Turn Left"
Following[2],[6](Turn Right) is Pressed Down				Overwritten with "Turn Right"
Following[2],[5](Go Straight) is Pressed Down				Overwritten with "Go Straight"
Following[2],[7](Facility Located in Left Direction) is Pressed Down				Overwritten with "Facility Located in Left Direction"
Following[2],[9](Facility Located in Right Direction) is Pressed Down				Overwritten with "Facility Located in Right Direction"

FIG.7

A/B	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[0]
[1]	Speech Storing Operation Started	Speech Storing Operation Ended/Symbol Type: Go Straight	—	Speech Storing Operation Ended/Symbol Type: "Turn Left"	Speech Storing Operation Ended/Symbol Type: "Go Straight"	Speech Storing Operation Ended/Symbol Type: "Turn Right"	Speech Storing Operation Ended/Symbol Type: "Facility in Left Direction"	—	Speech Storing Operation Ended/Symbol Type: "Facility in Right Direction"	Speech Storing Operation Ended/Map of Whole Travel Route Displayed
[2]	Speech Numeral/Increment/Speech Storing Operation Started	—	—	Symbol Type: Overwritten with "Turn Left"	Symbol Type: "Go Straight"	Symbol Type: Overwritten with "Turn Right"	Symbol Type: Overwritten with "Facility in Left Direction"	—	Symbol Type: Overwritten with "Facility in Right Direction"	Map of Whole Travel Route Displayed
[3]	Speech Numeral/Increment/Speech Storing Operation Started	—	—	Symbol Type: Overwritten with "Turn Left"	Symbol Type: "Go Straight"	Symbol Type: Overwritten with "Turn Right"	Symbol Type: Overwritten with "Facility in Left Direction"	—	Symbol Type: Overwritten with "Facility in Right Direction"	Map of Whole Travel Route Displayed
[4]	Speech Numeral/Increment/Speech Storing Operation Started	—	—	Symbol Type: Overwritten with "Turn Left"	Symbol Type: "Go Straight"	Symbol Type: Overwritten with "Turn Right"	Symbol Type: Overwritten with "Facility in Left Direction"	—	Symbol Type: Overwritten with "Facility in Right Direction"	Map of Whole Travel Route Displayed
[5]	Speech Numeral/Increment/Speech Storing Operation Started	—	—	Symbol Type: Overwritten with "Turn Left"	Symbol Type: "Go Straight"	Symbol Type: Overwritten with "Turn Right"	Symbol Type: Overwritten with "Facility in Left Direction"	—	Symbol Type: Overwritten with "Facility in Right Direction"	Map of Whole Travel Route Displayed
[6]	Speech Numeral/Increment/Speech Storing Operation Started	—	—	Symbol Type: Overwritten with "Turn Left"	Symbol Type: "Go Straight"	Symbol Type: Overwritten with "Turn Right"	Symbol Type: Overwritten with "Facility in Left Direction"	—	Symbol Type: Overwritten with "Facility in Right Direction"	Map of Whole Travel Route Displayed
[7]	Speech Numeral/Increment/Speech Storing Operation Started	—	—	Symbol Type: Overwritten with "Turn Left"	Symbol Type: "Go Straight"	Symbol Type: Overwritten with "Turn Right"	Symbol Type: Overwritten with "Facility in Left Direction"	—	Symbol Type: Overwritten with "Facility in Right Direction"	Map of Whole Travel Route Displayed
[8]	Speech Numeral/Increment/Speech Storing Operation Started	—	—	Symbol Type: Overwritten with "Turn Left"	Symbol Type: "Go Straight"	Symbol Type: Overwritten with "Turn Right"	Symbol Type: Overwritten with "Facility in Left Direction"	—	Symbol Type: Overwritten with "Facility in Right Direction"	Map of Whole Travel Route Displayed
[9]	Speech Numeral/Increment/Speech Storing Operation Started	—	—	Symbol Type: Overwritten with "Turn Left"	Symbol Type: "Go Straight"	Symbol Type: Overwritten with "Turn Right"	Symbol Type: Overwritten with "Facility in Left Direction"	—	Symbol Type: Overwritten with "Facility in Right Direction"	Map of Whole Travel Route Displayed
[0]	Speech Numeral/Increment/Speech Storing Operation Started	—	—	Symbol Type: Overwritten with "Turn Left"	Symbol Type: "Go Straight"	Symbol Type: Overwritten with "Turn Right"	Symbol Type: Overwritten with "Facility in Left Direction"	—	Symbol Type: Overwritten with "Facility in Right Direction"	Map of Whole Travel Route Displayed
Firstly Pressed Down	—	—	—	—	—	—	—	—	—	So Far Stored Information Cleared/Storing Operation Started

FIG.8

Step	Voice on the Other End	Inputting Operation				Speech Table		Map Creation Table		
		Start	Operator's Voice	End	Symbol	Speech Numeral	Stored Voice	Point Numeral	Speech Numeral	Symbol Type
N1		[0]								
N2	Come in the Third Keihin Highway from Tokyo, come down the Third Keihin Highway at the Kohoku interchange	[1]	Come in the Third Keihin Highway from Tokyo	[2]		S1	Come in the Third Keihin Highway from Tokyo	P1	S1	Go Straight
N3		[1]	Come down the Third Keihin Highway at the Kohoku interchange	[2]		S2	Come down the Third Keihin Highway at the Kohoku interchange	P2	S2	Go Straight
N4			Which direction?							
N5	Turn Right		Right		[6]			P2	S2	Turn Right
N6	Turn left at the first traffic signal of Third Keihin Highway Entrance	[1]	At the first traffic signal of Third Keihin Highway Entrance	[2]		S3	At the first traffic signal of Third Keihin Highway Entrance	P3	S3	Go Straight
N7			Turn Left		[4]			P3	S3	Turn Left
N8	Go straight for a while	[1]	Go straight for a while	[2]		S4	Go straight for a while	P4	S4	Go Straight
N9	A big intersection called 'Umedabashi'	[1]	Umedabashi	[2]		S5	Umedabashi	P5	S5	Go Straight
N10	Passing therethrough		Passing therethrough		[5]			P5	S5	Go Straight
N11	If you spot 'A' shrine on you right	[1]	If you spot 'A' shrine on you right	[2]	[9]	S6	If you spot 'A' shrine on you right	P6	S6	Facility in right direction
N12	Turn left at the traffic signal next to the Idezakihashi Intersection	[1]	At the traffic signal next to the Idezakihashi Intersection	[2]		S7	At the traffic signal next to the Idezakihashi Intersection	P7	S7	Go Straight
N13			Left		[4]			P7	S7	Turn Left
N14		[0]						P7	S7	Facility in left direction

FIG.9

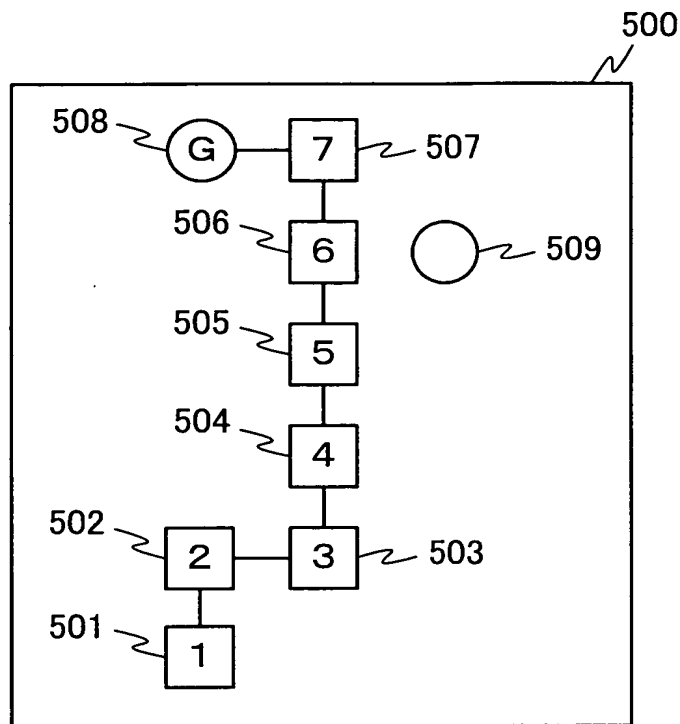


FIG.10

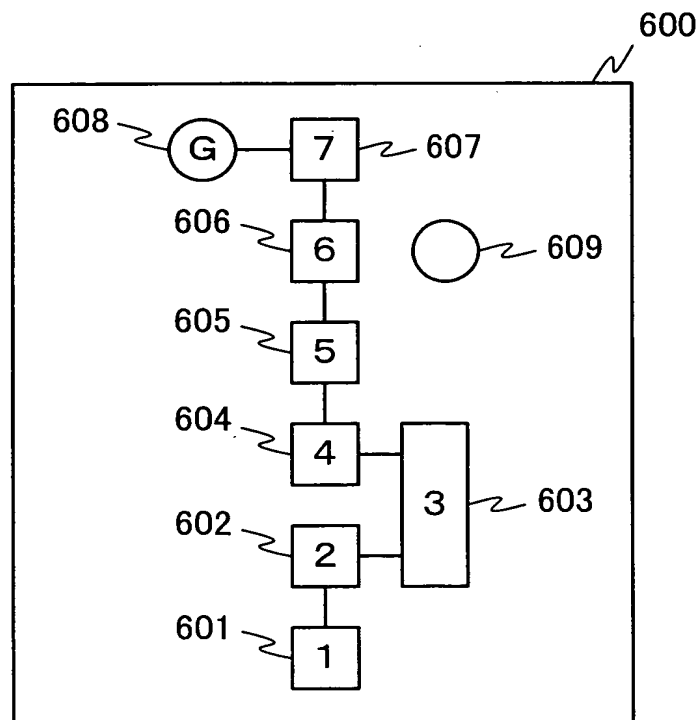


FIG.11

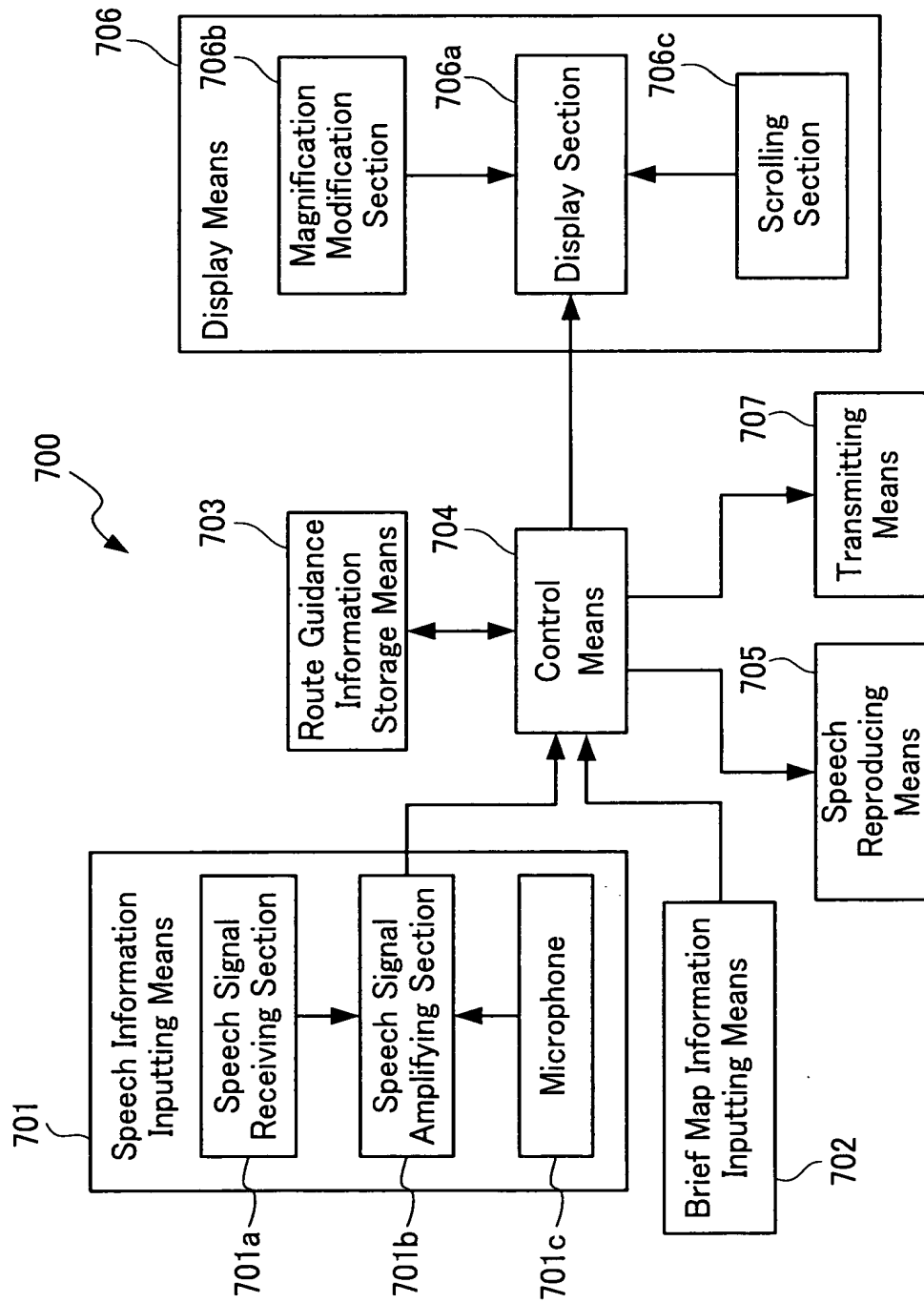


FIG.12

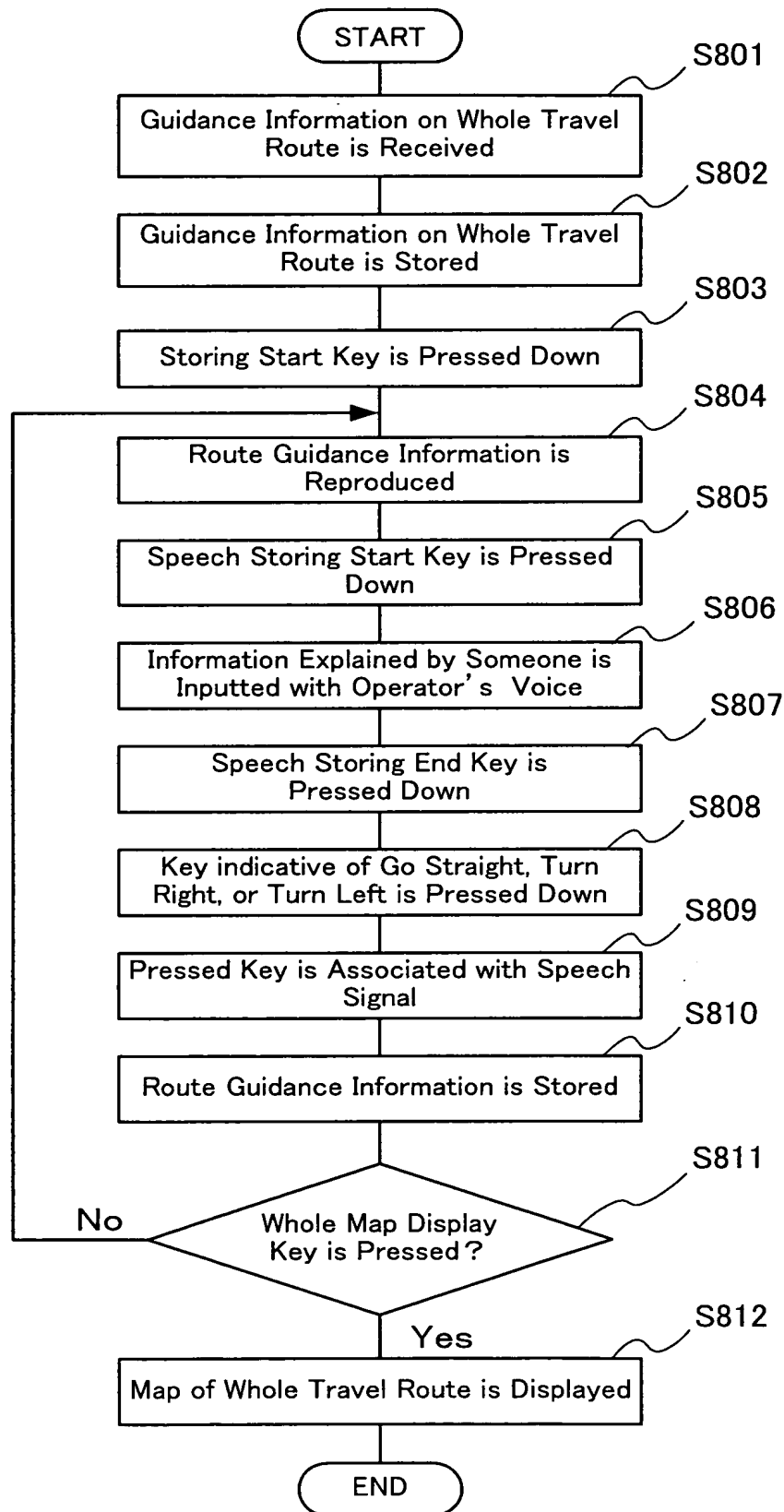


FIG.13

